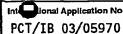
## INTERNATIONAL SEARCH REPORT



A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G11B7/125 G11B GiīB7/135 According to International Patent Classification (IPC) or to both national classification and IPC Minimum documentation searched (classification system followed by classification symbols) IPC 7 G11B Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, PAJ, WPI Data, INSPEC C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to dalm No. X EP 0 892 396 A (SHARP KK) 1,6-11, 13-15 20 January 1999 (1999-01-20) abstract figures 1,13,14; example 8 2-4,12, Y WO 01/24174 A (KONINKL PHILIPS ELECTRONICS Υ 2,4 NV) 5 April 2001 (2001-04-05) page 11, line 1 - page 14, line 5; figure PATENT ABSTRACTS OF JAPAN Y vol. 1999, no. 04, 30 April 1999 (1999-04-30) & JP 11 003528 A (MINEBEA CO LTD), 6 January 1999 (1999-01-06) abstract -/--Patent family members are listed in annex. Further documents are listed in the continuation of box C. Special categories of cited documents: "I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance Invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive slep when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. O document referring to an oral disclosure, use, exhibition or other means P document published prior to the international fliing date but later than the priority date claimed \*&\* document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 09/06/2004 28 May 2004 Authorized officer Name and malling address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 Annibal, P

1

## INTERNATIONAL SEARCH REPORT

Intd onal Application No PCT/IB 03/05970

| C.(Continu | ation) DOCUMENTS CONSIDERED TO BE RELEVANT  |                       |
|------------|---|-----------------------|
| Category ° |   | Relevant to claim No. |
| Y          | US 6 304 312 B1 (HOTAKA HIROKI ET AL) 16 October 2001 (2001-10-16) abstract column 1, line 15 - line 52 column 3, line 14 - line 30 | 12                    |
| Y          | US 4 657 354 A (KOBAYASHI HIROSHI) 14 April 1987 (1987-04-14) the whole document  | 16                    |
| X          | the whole document  EP 0 453 576 A (SONY CORP) 30 October 1991 (1991-10-30) abstract column 5, line 6 - line 26; figure 1           | 1-6,14,               |
|            |   |                       |
|            |   |                       |

1

## Inti-Itonal Application No PCT/IB 03/05970

| Patent document<br>cited in search report |    | Publication date | Patent family member(s)          |  | Publication date   |
|---|----|------------------|----------------------------------|--|--|
| EP 0892396                                | Α  | 20-01-1999       | JP<br>EP                         | 11039703 A<br>0892396 A2   | 12-02-1999<br>20-01-1999   |
| WO 0124174                                | A  | 05-04-2001       | WO<br>EP<br>HU<br>JP<br>TW<br>US | 0124174 A1<br>1135773 A1<br>0104888 A2<br>2003510749 T<br>451072 B<br>6567365 B1 | 05-04-2001<br>26-09-2001<br>28-03-2002<br>18-03-2003<br>21-08-2001<br>20-05-2003 |
| JP 11003528                               | A  | 06-01-1999       | NONE                             |  |  |
| US 6304312                                | B1 | 16-10-2001       | JP<br>WO<br>US                   | 10074333 A<br>9727583 A1<br>2001030732 A1  | 17-03-1998<br>31-07-1997<br>18-10-2001   |
| US 4657354                                | A  | 14-04-1987       | JP<br>JP<br>JP                   | 2036744 C<br>7064033 B<br>60056544 A   | 28-03-1996<br>12-07-1995<br>02-04-1985   |
| EP 0453576                                | A  | 30-10-1991       | JP<br>DE<br>DE<br>EP<br>US<br>WO | 3157843 A<br>69026601 D1<br>69026601 T2<br>0453576 A1<br>5394381 A<br>9107749 A1 | 05-07-1991<br>23-05-1996<br>10-10-1996<br>30-10-1991<br>28-02-1995<br>30-05-1991 |